Effective January 2024

# PowerWave 2 load bank tap-off box



This instruction leaflet describes the installation procedures for Eaton's PowerWave 2 load bank tap-off box (LBTOB) system.

### For any questions regarding installation, operation, service, or maintenance

Please call the Eaton Help Desk at:

United States: 1-800-843-9433 or 1-919-870-3028

Canada: 1-800-461-9166 ext 260

All other countries: Call your local service representative

For manual comments, suggestions, or to report a technical error within this document, please email:

LVB-NSBSalesGreenwood@Eaton.com

Download the most recent version of this product manual from the Eaton website Product page, Resources section:

Eaton.com/powerwave2

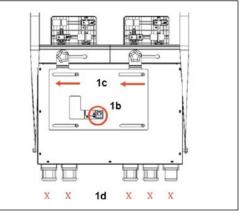
### **A WARNING**

EATON DOES NOT RECOMMEND LIVE INSTALLATION OF ELECTRICAL EQUIPMENT. BUSWAY RUNS HAVE HIGH VOLTAGES AND AMPERAGES. DO NOT INSERT TOOLS OR OTHER OBJECTS INTO ENERGIZED BUS RAILS OR OTHER BUS RUN COMPONENTS.

**Note:** Eaton recommends two-person team for installation. The unit weighs about 30 lb and must be inserted into the bus rail and held in place while the unit is secured to the rail with straps and clips.

### 1. Prerequisites for installation.

- **a.** The bus run should already be installed and functional.
- **b.** The circuit breaker on the LBTOB must be OPEN or OFF (**Figure 1**).
- c. Both contact engagement knobs should be fully in the left position so that the contacts on both masts are completely recessed (Figure 1).
- **d.** The load bank should not be attached to the LBTOB (**Figure 1**).



**Figure 1. Prerequisites** 

### 2. Placement of the LBTOB.

The LBTOB should be inserted into the bus rail near the end cap and after any tap-off boxes (TOBs) already installed on the rail.

The front of the unit should face out from the **Neutral** side of the bus rail.



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### 3. Install the retainer clips.

Install the two retainer clips (included) on the bus rail outside of the LBTOB position (**Figure 2**) on the Neutral side (**Figure 3**). The clips have different orientations for 250–400 A bus rails and 600–1000 A bus rails.



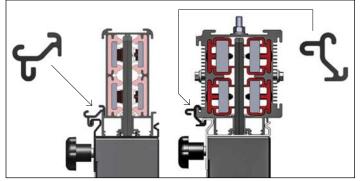


Figure 2. 250-400 A profile (left) and 600-1000 A profile (right)

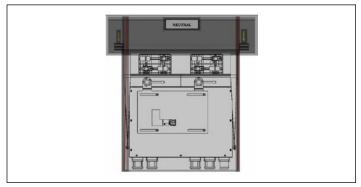


Figure 3. Neutral side

4. Insert the LBTOB into the rail.



### 5. Secure the LBTOB on the rail.

- a. Move both retainer clips inward over the lip of the LBTOB (Figure 4).
- **b.** Wrap the straps (shown in green) on each side around the bus rail. Connect each strap through the strap's cam buckle. The strap on each side should be tight and snug around the bus rail (**Figure 4**).

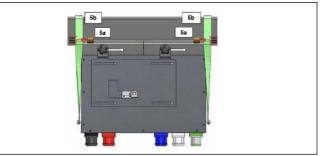


Figure 4. Secure the LBTOB on the rail

### 6. Push contact engagement knobs to the right.

Push both contact engagement knobs all the way to the right (**Figure 5**). (Each knob is attached to a separate circuit breaker cover plate.) This engages the contacts to the conductors in the bus rail and exposes the circuit breaker.



Figure 5. Push both contact engagement knobs

- 7. Connect the load bank cables ABCNG to the Cam-Loks on the LBTOB (Figure 6).
- 8. Close (turn on) the circuit breaker on the LBTOB.

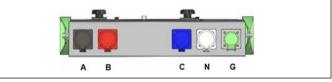


Figure 6. Bottom of unit

### **WARNING**

DO NOT CLOSE (TURN ON) THE LBTOB CIRCUIT BREAKER UNTIL ALL FIVE LOAD BANK CABLES ARE CONNECTED TO THE CAM-LOKS.

9. Follow recommended procedures as detailed by the load bank manufacturer.

To un-install, reverse the installation procedure.

### **A** CAUTION

TURN OFF THE CIRCUIT BREAKER BEFORE DETACHING THE LOAD BANK CABLES FROM THE CAM-LOKS.

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